## **Section 5**

## 510(k) Summary

1694038

This 510(k) Summary is submitted in accordance with the requirements of 21 CFR 807.87 and 807.92. Summary preparation date 12-21-09 [21 CFR 807.92(a)(1)].

## A. Applicant Name and Address [21 CFR 807.92(a)(1)]

Quantel Medical S.A.

APR 2 2 2010

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63039 Clermont Ferrand Cedex 2

**FRANCE** 

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### B. Contact Information

Quantel USA

601 Haggerty Lane

Bozeman, MT 59715

Tel: 406-586-0131

Fax: 406-586-2924

Contact person: Michael Johnson M.D.

### C. Device Trade Name, Common Name, Classification [21 CFR 807.92(a)(2)]

Trade Name: Compact TOUCH Ophthalmic Ultrasound System

Device Common Name: Ophthalmic Ultrasound System

Classification Name: System, Imaging, Ultrasonic, Ophthalmic (per 21 CFR)

892.1560)

Product Code: IYO

Panel: 86 Ophthalmic

Device Classification: Class II

## D. Predicate Devices [21 CFR 807.92(a)(3)]

The *Compact TOUCH* uses similar technology and physical output characteristics as the following predicate devices:

k051851 Quantel Medical AVISO Ophthalmic Ultrasound System

k993674 Quantel Medical POCKET Ultrasonic Pachymeter

## E. Device Description [21 CFR 807.92(a)(4)]

The Compact TOUCH is an ultrasonic system designed for ophthalmic use. It combines A and B type scans for diagnostic imaging of the eye. The system is composed of a main console controlled by a touch screen. It consists of three probes which plug into the main console; the B-scan probe, the A-scan probe, and a Pachymetry probe.

### F. Device Specifications [21 CFR 807.92(a)(6)]

The Compact TOUCH system includes three ultrasonic probes. The A-scan probe (TP-01 / TP-02-las) operates at 11 MHz and has an effective diameter of 5 mm. This probe is identical to that used by the predicate, AVISO k051851. The B-scan probe operates at 10 MHz and has an active diameter of 7.5 mm. This probe is identical to that used by the predicate, AVISO k051851. The Pachymetry probe is of the A-scan type with a frequency of 20 MHz with a 1.5 mm active diameter. This probe is identical to that used by the predicate, POCKET k993674.

### **G.** Indications for Use [21 CFR 807.92(a)(5)]

The QUANTEL MEDICAL Compact TOUCH Ophthalmic Ultrasound System and the probes that are used with it are indicated for diagnostic imaging and biometric measurement of the eye including:

- Visualization of the interior of the eye and the orbit by A and B scans.
- Axial Length measurement of the eye by ultrasonic means.
- Implanted IOL power calculation, using the Axial Length measurement.
- Measurement of corneal thickness by ultrasonic means.

### **H.** Performance Data [21 CFR 807.92(b)(2)]

Laboratory testing following the guidance "Information for manufacturers Seeking Marketing Clearance of Diagnostic Ultrasound systems and Transducers" (Sept 9, 200) was conducted to verify that the *Compact TOUCH* met design specifications and was substantially equivalent to the predicate devices. No Clinical testing is required.

### I. Conclusion [21 CFR 807.92(b)(3)]

Technologically, the *Compact TOUCH* was found to be substantially equivalent to the currently cleared k051851 Quantel Medical *AVISO* Ophthalmic Ultrasound System and k993674 Quantel Medical *POCKET* Ultrasonic Pachymeter. The indications for use are similar to these previously cleared devices. The risks and benefits for the *Compact TOUCH* are argued to be comparable to the predicate devices. We believe that there are no new questions of safety or efficacy raised by the introduction of the *Compact TOUCH*.



Food and Drug Administration 10903 New Hampshire Avenue Document Control Room –WO66-G609 Silver Spring, MD 20993-0002

Michael Johnson, M.D. Medical Product Manager Quantel USA 601 Haggerty Lane BOZEMAN MT 59715

APR 2 2 2010

Re: K094038

Trade/Device Name: Compact TOUCH Ophthalmic Ultrasound System

Regulation Number: 21 CFR 892.1560

Regulation Name: Ultrasonic pulsed echo imaging system

Regulatory Class: II

Product Code: IYO and ITX Dated: March 16, 2010 Received: March 19, 2010

#### Dear Dr. Johnson:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

This determination of substantial equivalence applies to the following transducers intended for use with the *Compact TOUCH* Ophthalmic Ultrasound System, as described in your premarket notification:

#### Transducer Model Number

10 MHz B-Scan Probe (Ref model number: B1 Biometry Probe (Ref model number: TP-01-b/TP-02-las Pachymetrey Probe (Ref model number: P1: (20 MHz A-scan) If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus permits your device to proceed to market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to <a href="http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm">http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm</a> for the Center for Devices and Radiological Health (CDRH) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

If you have any questions regarding the content of this letter, please contact Shahram Vaezy at (301) 796-6242.

Sincerely yours,

Donald St. Pierre

Acting Director

Division of Radiological Devices Office of In Vitro Diagnostic Device

**Evaluation and Safety** 

Center for Devices and Radiological Health

Enclosure(s)

# Section 4

# **Indications for Use**

510(k) Number (if known): NA
Device Name: Compact TOUCH Ophthalmic Ultrasound System
Indications for Use:
The QUANTEL MEDICAL Compact TOUCH Ophthalmic Ultrasound System and the probes that are used with it are indicated for diagnostic imaging and biometric measurement of the eye including:
• Visualization of the interior of the eye and the orbit by A and B scans.
Axial Length measurement of the eye by ultrasonic means.
• Implanted IOL power calculation, using the Axial Length measurement.
<ul> <li>Measurement of corneal thickness by ultrasonic means.</li> </ul>
. 4-1
Prescription Use X Over-The-Counter Use (Part 21 CFR 801 Subpart D)  AND/OR (21 CFR 801 Subpart C)
(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE OF NEEDED)
Concurrence of CDRH, Office of Device Evaluation (ODE)
Prescription Use  (Per 21 CER 810/109)  (Division Sign-Off)  Division of Radiological Devices  Office of In Vitro Diagnostic Device Evaluation and Safety

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510(k) Number (if known): NA

Device Name: COMPACT Touch

**Intended Use:** The Quantel Medical *COMPACT Touch* is intended to be used for:

- Visualization of the interior of the eye and the orbit by A and B-scans.
- The Axial Length measurement of the eye by ultrasonic means.
- Implanted IOL power calculation, using the Axial Length measurement.
- Measurement of corneal thickness by ultrasonic means.

### **Mode of Operation**

CLINICAL APPLICATION	A	В	M	PWD	CWD	COLOR DOPPLER	POWER (AMPLITUDE) DOPPLER	COLOR VELOCITY IMAGING	COMBINED (SPECIFY)	OTHER (SPECIFY)
Ophthalmic	P	P								<u> </u>
Fetal		Ì							· · · · · · · · · · · · · · · · · · ·	1
Abdominal		1			İ		,			
Intra-operative (specify)										
Intra-operative Neurological										-
Pediatric			ì				-			
Small Organ (Specify)	1									
Neonatal Cephalic	†	<del> </del>	†	<del> </del>	<del> </del>				1	<del> </del>
Adult Cephalic				<del> </del>	+					1
Cardiac							<del>-</del>			<del> </del>
Trans-esophageal				†			•		<del> </del>	
Trans-rectal			1						1	
Trans-vaginal	1		1	<b>1</b>				1		
Trans-urethral			1		1		/			· · · · · · · · · · · · · · · · ·
Intra-luminal				1				<u> </u>		
.Peripheral	Ì		1			1			1	
Vascular	1	.l							,	
Laparoscopic			1			-				
Musculo-Skeletal				"						
Other (Specify)*		1								

N= new indication; P= previously cleared by FDA; E= added under Appendix E

Additional Comments:

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Concurren	nce of CDRH, Office of Device Evaluation (ODE)
Prescription Use	_ (Per 21 CFR 810.109)
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(Division Sign-Off)
Division of Radiological Devices
Office of In Vitro Diagnostic Device Evaluation and Safety

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510(k) Number (if known): NA

Device Name: COMPACT Touch with 10 MHz B-Scan Probe(Ref model number B1)

**Intended Use:** The intended use of the *COMPACT Touch* with the 10MHz B-scan Probe is diagnostic imaging of the eye by B scans.

### Mode of Operation

CLINICAL APPLICATION	A	В	М	PWD	CWD	COLOR DOPPLER	POWER (AMPLITUDE) DOPPLER	COLOR VELOCITY IMAGING	COMBINED (SPECIFY)	OTHER (SPECIFY)
Ophthalmic		P			· · · · · · · · · · · · · · · · · · ·	<del></del>	DOTTEDER	HALVORAG	<del> -</del>	<del></del>
Fetal								<del> </del>	<del>- </del>	<del> </del>
Abdominal								<del></del>	<del>                                      </del>	<del></del>
Intra-operative (specify)						-			-	<del> -</del>
Intra-operative			<u> </u>		<b>—</b> —		<del></del>	<del>                                     </del>	<del>                                      </del>	<del>├</del>
Neurological		1	ļ	i						1
Pediatric			T —			· · · · · · · · · · · · · · · · · · ·	<del>-</del>	<del> </del>	<del>-</del>	<del> </del>
Small Organ (Specify)								-		.[
Neonatal Cephalic		<del>                                     </del>			<del></del>	··	-	<del></del>	<del>                                       </del>	<del></del>
Adult Cephalic	_			-	<del> </del>	<del> </del>	<del></del>	<del> </del>	<del> </del>	<del>  -                                   </del>
Cardiac			$\overline{}$		<del></del>		<del>-</del>	<del></del>	<del></del>	, <del> </del>
Trans-esophageal	_	<del></del>				<del> </del>	<del> </del>	· · · · · · · · · · · · · · · · · · ·	<del> </del>	<del> </del>
Trans-rectal			1		<del> </del>		<del></del>	<del></del>	<del> -</del>	<del> </del>
Trans-vaginal	_		1		-	<del> </del> -			<del> </del>	<del> </del>
Trans-urethral						<del></del>	· <del>                                      </del>	<del></del>		<del> </del>
Intra-luminal						<del> </del>	<del> </del>	<del></del>	<u> </u>	<del>                                      </del>
Peripheral	_					<del> </del>	<del>                                       </del>	<del></del>	<del> </del>	<del> </del>
Vascular			i			1		İ		
Laparoscopic					· · · · ·	<u> </u>		<del></del>	<del> </del>	<del> </del>
Musculo-Skeletal			_			<del></del>	<del></del>	<del></del>	<del> </del>	<del> </del> -
Other (Specify)*		<b></b>				<del> </del>	<del> </del>	<del></del>	<del></del>	<del> </del>

N= new indication; P= previously cleared by FDA; E= added under Appendix E

**Additional Comments:** 

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Prescription Use (Per 21 CFR 810.109)	•

Division of Radiological Devices

Office of In Vitro Diagnostic Device Evaluation and Safety

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510(k) Number (if known): NA

**Device Name:** Compact TOUCH with the Biometry Probe (Ref model number: TP-01-b / TP-02-las)

**Intended Use:** The *Compact TOUCH* with the Biometry Probe is intended for the Axial Length measurement of the eye by ultrasonic means. This measurement is required to make the IOL calculation for most types of cataract surgery.

### **Mode of Operation**

CLINICAL APPLICATION	A	В	М	PWD	CWD	COLOR DOPPLER	POWER (AMPLITUDE) DOPPLER	COLOR VELOCITY IMAGING	COMBINED (SPECIFY)	OTHER (SPECIFY)
Ophthalmic	P	]							<del></del>	-
Fetal	]	1			1			<del></del>	<del>  "-</del>	<del>                                     </del>
Abdominal								<u> </u>	<del> </del> -	<del></del>
Intra-operative (specify)										
Intra-operative Neurological										
Pediatric		·	1		· · · ·		· · · · · · · · · · · · · · · · · · ·		<del>  -</del> -	1
Small Organ (Specify)							· · · · · · · · · · · · · · · · · · ·	<u> </u>	-	
Neonatal Cephalic					1		<del></del>		<del> </del> -	<del>1 -</del>
Adult Cephalic		T	ĺ	<u> </u>		1			<del> </del>	<del>                                       </del>
Cardiac					<u> </u>	1			·	<del> </del>
Trans-esophageal		1 -			<u> </u>	†	<del></del>	<del></del>	<del> </del>	<del> </del>
Trans-rectal					i -				<del> </del>	<del> </del> -
Trans-vaginal				i				<del></del>	<del></del>	<del>                                       </del>
Trans-urethral		·			·   · · · · · · · · · · · · · · · · · ·		<del></del>	<del></del>	<del></del>	<del>                                     </del>
Intra-luminal					1	<u> </u>			<del></del>	-
Peripheral		i -		[	1 "	· · · · · ·		<del></del>	<del></del>	<del> </del>
Vascular					1			ļ	1	
Laparoscopic			ĺ			1	·		<del> </del>	<del></del>
Musculo-Skeletal				ĺ	1		_	<del></del>	<del> </del>	t
Other (Specify)*						<del>                                     </del>	<del> </del>	<del>-</del>	·	<del>                                     </del>

N= new indication; P= previously cleared by FDA; E= added under Appendix E

**Additional Comments:** 

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Prescription Use_	<u>\dot</u>	(Per 21 CFR 810.109)	

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510(k) Number (if known): NA

Device Name: Compact TOUCH with the Pachymetry Probe (Ref model number: P1: (20 MHz A-scan))

**Intended Use:** The *Compact TOUCH* with the Pachymetry Probe is intended for the measurement of corneal thickness by ultrasonic means, which is required for some types of corneal surgery.

### Mode of Operation

CLINICAL APPLICATION	A	В	М	PWD	CWD	COLOR DOPPLER	POWER (AMPLITUDE) DOPPLER	COLOR VELOCITY IMAGING	COMBINED (SPECIFY)	OTHER (SPECIFY)
Ophthalmic	P					-			<u> </u>	<del></del>
Fetal								-	<del>                                     </del>	<del> </del> -
Abdominal					T	† · · · · ·			· <del> -</del>	<del>                                     </del>
Intra-operative (specify)							-			
Intra-operative Neurological										
Pediatric		1	<u> </u>			<del>                                     </del>	<del>-</del>		· · · · · · · · · · · · · · · · · · ·	
Small Organ (Specify)										
Neonatal Cephalic					1	T			<del></del>	<del></del> -
Adult Cephalic				1	T				-	<del> </del>
Cardiac		1				1			<del>                                       </del>	<del> </del>
Trans-esophageal		1		· · ·	<u> </u>	- <del></del>	<del>-</del>	-	<del>                                       </del>	<del> </del>
Trans-rectal		1					<del>-</del>			<del>                                     </del>
Trans-vaginal				_	1	<del> </del>			<del></del> -	
Trans-urethral		1		-		<del>                                     </del>			<del>  -</del>	
Intra-luminal							<del></del>		<del></del> -	<del> </del>
Peripheral Vascular					†					
Laparoscopic			<b>├</b> ─	<u> </u>	<del>                                     </del>	<del> </del>	<del></del>		<del></del>	<del> </del>
Musculo-Skeletal	<del></del>		<u> </u>	<b> </b>	+	· ·	+		<del> </del>	<del></del>
Other (Specify)*		†			<del> </del>		<del></del>			<del></del>

N= new indication; P= previously cleared by FDA; E= added under Appendix E

### **Additional Comments:**

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Prescription Use	X	(Per 21 CFR 810.109)							

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